

August 21, 2007

BIO-MICROBICS, INC.  
ALLISON BLODIG  
8450 COLE PKWY.  
SHAWNEE KS 66227

Re: Description: SEWAGE TREATMENT APPARATUS (also see SEWAGE TANKS)  
Manufacturer: BIO-MICROBICS, INC.  
Product Name: RETRO FAST  
Model Number(s): 0.375(375 GPD)  
Product File No: 20070365

The specifications and/or plans for this plumbing product have been reviewed and determined to be in compliance with chapters Comm 82 through 84, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an approval based on the Wisconsin Statutes and the Wisconsin Administrative Code. **This approval is valid until the end of January 2013.**

This approval is contingent upon compliance with the following stipulation(s):

- This product must be sized based on daily wastewater flow (gallons per day). The gallons per day value must be at least 150 gallons per day per bedroom.
- Installation and servicing of this product must be in accordance with the manufacturer's instructions. A copy of the manufacturer's installation and servicing instructions must be given to the owner of the system.
- Waste entering the tank housing this product must:
  1. Be pretreated by a department approved exterior grease interceptor which flow by gravity to a surge tank; and
  2. The surge tank must be a department approved tank which has a time controlled pump which evenly doses the treatment tank housing this product.
- Based on testing data submitted and reviewed by the department, this approval recognizes that this plumbing product will reduce the concentration of contaminants with an average influent value of Total Kjeldal Nitrogen (TKN) of 37.62 mg/L, Ammonia (NH<sub>4</sub>) 24.98 mg/L, BOD<sub>5</sub> 134 mg/L, TSS 164 mg/L, and Fecal Coliform 1452000 cfu/100 ml to produce an effluent with values of Total Kjeldal Nitrogen (TKN) of 10.43 mg/L, Nitrate (NO<sub>2</sub>) 0.29, Nitrite (NO<sub>3</sub>) 4.76 mg/L, Ammonia (NH<sub>4</sub>) 3.74 mg/L, BOD<sub>5</sub> 10.4 mg/L, TSS 18 mg/L, and Fecal Coliform 16700 cfu/100 ml when this product is maintained in accordance to the manufacturer's maintenance requirements.
- This unit must be installed in a tank or tanks that comply with the following:
  1. This model and size Bio-Microbics treatment unit may be installed in a single- or two-compartment tank with or without any preceding tank.
  2. The inside width of the tank or tank compartment that houses the Bio-Microbics treatment unit must be at least 40 inches.

3. The inside length of the tank or tank compartment that houses the Bio-Microbics treatment unit must be at least 36 inches.
  4. The minimum liquid level of the tank or tank compartment that house the Bio-Microbics treatment unit must be at least 36 inches.
  5. The capacity of the tank compartment or tank, that houses the Bio-Microbics treatment unit must be at least 225 gallons.
  6. The diameter of the outlet pipe from the Bio-Microbics treatment unit is three inches.
  7. The dimension of the hole in the tank cover must have a minimum dimension of 18 inches.
  8. The maximum bury depth of the tank is 48 inches.
- The maximum daily wastewater flow, which may discharge through this product, is 375 gallons per day.

**This approval supersedes the approval issued on 12/3/2003 product file number 20020404.**

This approval letter shall be incorporated with your previously approved plans and/or specifications approved under product file number 20020404.

The department is in no way endorsing this product or any advertising, and is not responsible for any situation which may result from its use.

Sincerely,

Jean M. MacCubbin, CST  
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